**GSM teknik**

# GPS Tracking System

## TK-06A

# User Manual

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release.

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# GSM teknik

## 1. Summary functions

Working Based on existing GSM/GPRS network and GPS satellites, this product can locate and monitor any remote targets by SMS or GPRS.

## 2. Main functions

· GSM quad-band frequency for globe use.

- Real time tracking location by SMS/GPRS.
- Real time voice monitoring function.
- Recover original password.
- Set authorized number.
- Reboot device.
- Overspeed alarm alarm.
- ACC anti-theft alarm.
- Device lights turn into sleep mode after 5 minutes.
- Efficient data time interval : ACC on 20s;ACC off 70s
- Connect external relay to realize controlling oil and circuit of the vehicle (optional).
- Built-in backup battery to realize power failure alarm (optional).

## 3. Specs.

| Content | Specs. |
|---|---|
| Dim. | 8 cm x 4.2 cm x 1 cm |
| Weight | 50g |
| Network | GSM/GPRS/GPS |
| Band | 900/1800Mhz or 850/900/1800/1900 Mhz |
| GPS chip | UBLOX |
| GSM module | MTK60 |
| GPS sensitivity | -159dBm |
| GPS accuracy | 5m |
| Time To First Fix | Cold status 45s<br>Warm status 35s<br>Hot status 1s |
| Work voltage | 9V-36V |
| Storage Temp. | -40°C to +85°C |
| Operation Temp. | -20°C to +55°C |
| Humidity | 5%--95% |

## 4. Installation instructions

### 4.1 Preparation

4.1.1 Open the package to check the device model number is correct, be with full accessories, or else please contact your supplier;

4.1.2 Choose SIM card, need insert a GSM SIM card into the device, please refer to the suggestion of your supplier for SIM card choice.

Notice: **Please insert SIM card before turning the device power switch to on**; The SIM card need open the GPRS function. Please make sure SIM card with full balance.

### 4.2 Installation

The device is hidden type installation, we suggest the device installing by professional institution. Please pay attention to the following points:

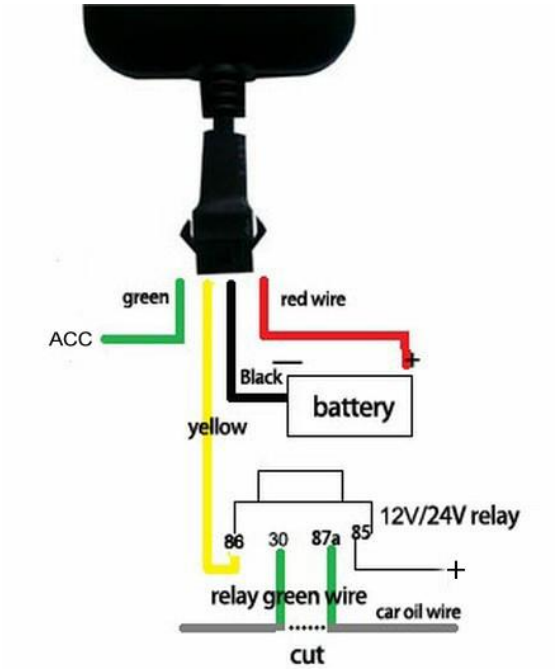
4.2.1 To avoid the thieves destruction, the device installation place should be as far as hidden.

4.2.2 Avoid putting the device with reversing radar, car burglar alarm and any other vehicle communication devices;

4.2.3 Can fix the device by ribbon or wide sponge powerful two-side glue stick;

4.2.4 The device has built-in GSM and GPS antenna, make sure the receive side upward and there is no metal shielding.

4.2.5 Recommended installation place: ①The hidden place in the board below the front windscreen; ② The hidden place around former dashboard (nonmetal material for skin); ③The hidden place in the board below the back windscreen.




Notice: If the windscreen glued by metal thermal insulation layer or heating layer, it will reduce the GPS receive signal and lead to GPS work disorder, then please change the installation place.

### 4.3 Device light description

| Light | Signal |
|---|---|
| Red light | Power |
| Yellow light | GSM signal |
| Blue | GPS signal |

**Note:** the three lights must be stable lighting represents device can work normally. Device will turn into sleep mode with lights off after around 5 minutes, it will wake up if make a call to device number.

## 5. Wires connection

1. Red wire connects to vehicle power anode
2. Black wire connects to vehicle power cathode
3. Yellow wire connects to oil or circuit control wires
4. Green wire connects to ACC wire

**Note: Device must connect to ACC wire**

## 6. Device Parameter Settings

### 6.1 Initialization

Send SMS "**#begin#**" to the tracker, it will reply "begin ok" and initialize all the settings. (Default password: 123456). Remark: initialization is resetting all the parameters to factory defaults.

For example, send SMS "#begin#", If succeeded, it will reply "begin ok".

### 6.2 Set password

6.2.1 Set Password: Send SMS: "**#password#old password#new password#**" to the unit to change the password.

For Example, send SMS: "#password#123456#666888#" to device, it will reply SMS: "password OK".

6.2.2 Make sure the new password is in 6 digits arabic numbers, or the device cannot recognize the password.

6.2.3 Resume original password: send SMS: "#resume#" to the device, it will reply SMS: "resume password, password is 123456".

### 6.3 Authorization

6.3.1 Set authorization: send SMS"**#admin#password#cell phone number#**" to set up authorized number, device will reply "admin ok".

6.3.3 Delete authorization send SMS"**#noadmin#password#authorized number#**"to delete the authorized number, device will reply "no admin ok".

**6.4 Single Locating**

6.4.1 If there is no authorized number, any number dials up the device number, it will report tracking message; If already set authorized number, then it will not respond when an unauthorized number calls it.

6.4.2 **Dialing tracking**: make a call to device number, it will hang up and reply a real-time tracking message.

6.4.3 **SMS tracking**: send SMS“**#smslink#123456#**”, it will reply a real-time tracking message.

*Tracking location, when GPS signals is weak, you will receive the last location when GPS is available. If it is different with its exact current location, pay attention to check the time included in the SMS.

**6.5 Get geographical location**

6.5.1 Must set the SIM Card APN parameter firstly before using this function, if there is APN user name and password, Please refer to point 6.13 to set.

6.5.2 Send SMS: “**DW**” to device, it will reply current location info. For example: ADD: Floor 5, Bldg C, LaoWei 2nd Industrial Park, DaLang South Rd, Longhua town, Shenzhen,China

Note: this function may not work in some certain area.

**6.6 Auto continuous track**

6.6.1 Limited times auto track: Send SMS “**#at#30#sum#15#**”to the device, it will reply the tracking message at 30s intervals for 15 times. (default “s”:second).

6.6.2 Unlimited time auto track: Send SMS “**#at#30#sum#0#**” to the device. Remark: device must be connected to tracking software.

6.6.3 Cancellation: Send SMS “**#noat#password#**” to the device.

**Note: device defaults when ACC ON, time interval is 20s, when ACC OFF, time interval is 70s, only ACC ON time interval can change.**

**6.7 Voice Surveillance**

6.7.1 The command to switch between Track and Monitor are “tracker” and “monitor

6.7.2. The default mode is “track” (Tracking status).

6.7.3. Send SMS “**#monitor#password#**” to the device, and it will reply “monitor ok!” and switch to “monitor” mode. Then use mobile phone to dial the device number, it will get though and enter voice listening function.

6.7.4. Send SMS “**#tracker#password#**” to the device, it will reply “tracker ok!” and restore to “track” mode.

**6.8 Geo-fence**

Set up geo-fence for the unit to restrict its movement within a district. The device will send message to the authorized number automatically when it exceed the district.

6.8.1 Set up

When the unit stays immobile in a place, send

SMS:“**#stockade#password#semidiameter#**”to unit to set the restricted district. In case of breach, it will send SMS “stockade! + Geo-info” to the authorized number.

For example, Send SMS: “#stockade#123456#3#”, “3” represents 300 meters.

6.8.2 Cancel: Send SMS: “**#nostockade#password#**” to deactivate this function, it will reply “no stockade ok”.

**6.9 Overspeed alarm**

6.9.1 Set up: Send SMS:“**#speed#password#speed number in 3 digits#**” to the device (suppose the speed is 80km/h), EG, send SMS “#speed#123456#080#”, and it will reply “speed ok ”. When the car moves exceeding 80 km/h, the unit will send SMS alert “speed alarm” to the authorized number.

6.9.2 Cancel: send SMS “**#nospeed#password#**” to deactivate the overspeed alarm. it will reply “cancel speed ok”.

**6.10 ACC ON alarm**

6.10.1 Send SMS"**#ACC#ON#**" to device to start illegal start alarm function, when vehicle ignition on, device will reply "ACC!" to the authorized number.

6.10.2 Send SMS"**#ACC#OFF#**"to device to close the function.

**6.11 Time Zone Setting**

Remark: UTC+8 is default time zone.

6.11.1 Send SMS “#**timezone#password#direction#time zone value in hours#time zone in munites#**”. If set OK, it will reply “time zone ok”. For example, if in UTC-6, send SMS “#timezone#123456#W#6#00#”. If in UTC+5.30, send SMS “#timezone#123456#E#5#30#”.

**6.12 GPRS setting**

User must send SMS via cell phone to set IP, port and APN before starting GPRS.

**6.12.1 Setting APN**

6.12.1.1 APN standards for Access Point Name and differs from country to country. For

more information about the local APN, inquiry from your local GPRS network operator.
6.12.1.2 Send SMS "**#apn#password#APN content#APN user name#APN password#**" via a cell phone and if succeeded, the tracker will return the message "set APN OK".
E.g. send SMS command "#apn#123456#cmnet#".
Notes: CMNET is the APN content of China Mobile (it has no APN user name and password). If there is no APN user name and password, then no need to write APN user name and password.

**6.13 IP and Port setting**

6.13.1 Send SMS "**#IP#password#ip address#port number#**". If succeeded, "set ip address and port ok" will be returned by SMS. Note: "IP" in SMS must be capital letter.

E.g, Send SMS command "**#**IP# password #58.64.200.27#6780**#**" to the device (58.64.200.27 is IP, 6780 is port )

**6.14 Cut oil or circuit (optional)**

Send SMS "**#stopoil#password#**" to device, it will reply "stop oil ok", cut oil successfully.
Send SMS "**#stopelec#password#**" to device, it will reply "stop electricity ok", cut circuit successfully.

**6.15 Recover oil or circuit**

Send SMS "**#supplyoil#password#**" to device, it will reply "supply oil ok", recover oil successfully.
Send SMS "**#supplyelec#password#**" to device, it will reply "supply electricity ok", recover circuit successfully.

**6.16 Power failure alarm (optional)**

Built-in backup battery to realize power failure alarm, it will send SMS "cut power alert!" to the authorized number.

**6.17 Check device setting parameters**

Send SMS "**TCP**" to device, device will reply SMS " IP+port+APN+GPRS setting(A: valid,V: invalid).